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ABSTRACT

The manual is the sixth of six student manuals for use in a course on occupational health and safety for supervisory personnel. The manual contains lessons 12 and 13 of the 15 consecutively-numbered lessons, each of which contains study questions (and answers) interwoven with the text and review questions at the end of each section. Lesson 12 provides information about techniques of communicating the contents of the Occupational Safety and Health Act to employees so that they will both understand the law and comply with its provisions. Lesson 13 covers the how and when of providing safety and health training, especially in the case of employees performing new jobs, and discusses ways of making and keeping employees aware of hazards. (JR)

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A Programmed Instruction Course

Principles and Practices of Occupational Safety and Health

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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STUDENT MANUAL
Booklet Six

U.S. DEPARTMENT OF LABOR
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2

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INDEX TO LESSONS

Lesson	*Title*	*Page*
No. 12	Communicating the Occupational Safety and Health Act to Employees	1
No. 13	How and When to Provide Safety and Health Training	26

LESSON 12

COMMUNICATING THE ACT TO EMPLOYEES

This lesson will give you information about techniques of communicating the contents of the Occupational Safety and Health Act to the employees you supervise so they will UNDERSTAND the law. The lesson will also tell you about techniques for motivating employees to COMPLY with the law.

The first step is to give the employees a general introduction to the Act, using some of the same introductory material presented to you in Lesson 1. Your introductory communications should include the following information:

- The law requires employers to keep their employees informed of their protections and obligations under the Act, including the provisions of applicable standards.
- The law requires each employee to comply with occupational safety and health standards and all rules, regulations, and orders issued in connection with the Act that apply to the employee's actions.

It is important to be sure your employees understand that one major purpose of the law is to assure their well-being and that to accomplish this goal both employer and employees have an obligation to comply with the law.

By now you realize the broad impact the Occupational Safety and Health Act is having on business and industry. Many authorities believe this law is the most important piece of legislation of its type in recent history. To accomplish its goals most effectively, both the LETTER and the SPIRIT of the law must reach all levels in all places of employment. This includes every person in an organization, from the newest employee to the senior management representative. It includes blue-collar and white-collar employees, office personnel and shop personnel, maintenance and production employees alike. Impress on them that every single person in the company must cooperate, that you intend to, and that you expect them to, for the benefit of all.

For the law to reach and influence all levels, it must be understood. Understanding and compliance require communication and motivation. To be understood, the law must be communicated properly. To be effective, employees and employers alike must understand its goals and how it works, and be motivated to comply. The letter and the spirit of the law are both important in this process. FINAL responsibility for achieving compliance with the law is the EMPLOYER'S, and this responsibility can best be fulfilled by effective communication and motivation. As you have seen from preceding lessons, the LETTER of the Act emphasizes:

- duties of employers and employees
- standards that must be met
- need for recordkeeping
- citations, fines, and penalties

History and human nature show that laws (just like in-plant rules) are not very effective unless they have some TEETH in them. The letter of the law puts the teeth in it.

The SPIRIT of the Act is reflected in the following goals:

- to assure safe and healthful working conditions
- to reduce accidental deaths, injuries, and occupational illnesses
- to help people by ridding workplaces of hazards
- to cut the human and economic waste that injuries and illnesses cause
- to preserve human resources

The spirit of the Act is POSITIVE and HUMANITARIAN.

The Act requires employees to follow safety and health rules, but final responsibility for compliance with the law rests on the shoulders of the employer. It is the employer who must assure employee observance of the law. Obtaining employee compliance requires good communication between employer and employee. YOU as a supervisor are one of the employer's main channels of communication. In your day-to-day supervision of employees YOU have both the opportunity and the obligation to make the law work effectively through proper communication and motivation.

The Act requires employers to post certain notices to keep employees informed of their protections and obligations under the ACT (FEDERAL REGISTER Section 1903.2). The employer is required to display a copy of the OSHA poster titled "Safety and Health Protection on the Job" displayed in the center of the recordkeeping requirements booklet. You should read that poster right now. It informs employees of their rights and obligations under the law.

1. By displaying this poster, the employer can accomplish which two things described below?

   a. inform employees about their protections and obligations under the law

   b. comply with the law

   c. inform employees about the employer's annual job-related injury and illness record

2. The OSHA Standards require the EMPLOYER TO POST AN ANNUAL SUMMARY of occupational injuries and illnesses (CFR 1904.5) This summary must appear in a prominent place where it can be seen by all employees. By posting this annual summary, the employer can accomplish which two of the following things?

   a. comply with the law

   b. inform employees of their protections and obligations under the law

   c. inform employees of the employer's job-related injury and illness record for the year

The OSHA poster, the annual summary of occupational injuries and illnesses, and other safety and health posters and messages can be displayed on bulletin boards. The effectiveness of bulletin board displays is

ANSWERS TO QUESTIONS:

1. a. Inform employees b. Comply with the law
   Employees also have to be informed about the annual job-related injury and illness record, but this information is not contained in the OSHA poster.

2. a. Comply with the law c. Inform employees about the employer's record for the year
   Information about employee protections and obligations under the law is in the OSHA poster.

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influenced by three factors: how many bulletin boards you use, where they are located, and how often displays are changed. Some good rules to follow when using bulletin boards are:

- put bulletin boards in locations where messages will get maximum exposure
- change displays often to maintain interest
- use enough bulletin boards to give a message maximum exposure

3. Would the locations listed below be good places to put bulletin boards to provide maximum exposure for safety and health messages?

	Yes	*No*
a. water fountain	____	____
b. wall clock	____	____
c. points of congestion where employees can see them	____	____
d. hallway used by only a few employees	____	____

Employees are usually moving rapidly in and out of the entrances and exits of buildings. These entrances and exits are not the best places for safety and health bulletin boards, because employees won't take time to look at them when they are walking rapidly.

COMMUNICATION PRINCIPLES

Three principles of effective safety and health communications are:

- repetition - the MORE OFTEN a message is repeated, the more likely it is to be remembered
- specifically - the MORE SPECIFIC a communication is, the more effective it will be
- relevance - the MORE APPLICABLE the contents of a message are to the work area where it is posted, the more effective it will be

ANSWERS TO QUESTIONS:

3. a., b., c. Yes d. No

Water fountains, wall clocks, and points of congestion are good locations for bulletin boards, but a hallway used by only a few employees would not be the best locatio n because the message would not be seen by the largest number of employees.

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4. According to the repetition principle, which practice described below is likely to be more effective in communicating safety and health information?

   a. expose each employee to a safety or health message at least once a month

   b. expose each employee to a safety or health message once a day

According to the principle of specificity, a safety or health message should not be just a slogan, but should have some SPECIFIC CONTENT. For example, "avoid injury" is a slogan. So is "lift correctly." However, "avoid injury; lift with your legs not your back," is a message with specific content. Even better is the example at the bottom of this page, which also has a picture.

5. According to the principle of relevance, a safety or health message should APPLY TO THE AREA where it is posted. For example, the message about correct lifting procedures illustrated in the preceding item would be more appropriate in a merchandise receiving or shipping area than in the billing department where invoices are prepared. Match each message in Column A with the most appropriate location in Column B.

Column A	*Column B*
a. LOCK OUT INJURY: PUT SAFETY LOCKOUT TAGS ON EQUIPMENT CONTROLS WHILE YOU REPAIR THE EQUIPMENT	• Machine shop
b. PROTECT YOUR EYESIGHT: WEAR SAFETY GOGGLES WHILE OPERATING GRINDING MACHINES	• Maintenance Department

ANSWERS TO QUESTIONS:

4. b. Expose each employee to a safety or health message at least once a day. A message gets a lot more repetition if read daily than if read monthly.

5. a. Maintenance Department. The maintenance personnel are the ones who will be repairing the equipment, so they are the ones you want to reach with the message about putting tags on the equipment controls.

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6. Which message below is only a slogan and which has specific content?

	Slogan	*Specific Content*
a. protect your eyesight	_____	_____
b. protect your eyesight; wear safety goggles when operating grinding machines	_____	_____

Several proven principles of effective communication have been given the name "the FIDO approach" as an aid in remembering them:

F - frequency - the MORE OFTEN a message is repeated, the more likely it is to be remembered

I - intensity - the MORE VIVID, enthusiastic, personalized, and positive the communication is, the better it will be remembered

D - duration - SHORTER messages are more likely to be remembered than longer ones

O - over again - learning is enhanced and strengthened by REPETITION

Does the "frequency principle" sound familiar to you? It should, because it is essentially the same idea as the "repetition principle." And what about the "over again principle" above? Does it sound familiar, too? When you think about it, you will realize that the "over again principle," the "frequency principle," and the "repetition principle" are all saying the same thing in different words: the more often something is repeated, the more likely it is to be remembered. The fact that you learned this principle is an illustration that IT WORKS!

Rule booklets and employee handbooks are a widely used form of communication regarding safety and health. They often are pocket-sized so they can be easily carried on the job. They usually contain such items as a company's general safety rules, specific departmental rules, safe job instruction reminders, and related safety and health information.

Employee magazines and newsletters are forms of communication about safety and health which are widely used to reach a majority of employees. These publications are especially important means of maintaining interest in job safety and health and keeping employees informed about the subject. They can carry items about various aspects of job safety and health such as the Act, what the company is doing to promote safe and healthful work conditions, safety and health contests, the positive safety and health performance of specific departments and individuals, unusual accidents or job-related illnesses and what can be learned from them, safe and healthful work practices, and the benefits of safe and healthful job behavior.

ANSWERS TO QUESTIONS:

6. a. Slogan. This is not as good as a specific message.
   b. Specific Content. The message not only tells you what to do, but how to do it.

In addition to the familiar forms of written safety and health communications which have been discussed, a great deal of effective safety and health communication takes place by people talking to each other, especially supervisors talking to the employees they supervise. Safety and health talk may take the form of a one-to-one conversation or a group conversation, it may be informal or formal, it may be live or even taped. Safety and health talk may range from a prerecorded message from the senior management representative, for example, to a quick job safety or health tip you give an employee in ten seconds, such as "Sam, please take that grinder to the tool crib and exchange it for one without a frayed wire; I don't want to see you get shocked or burned." Since YOU have more direct, closer, and more frequent contact with employees than does anyone else in management, YOUR personal communication efforts are particularly important. Employees learn and are motivated by what YOU say in job indoctrination, day-to-day coaching, job instruction, and safety and health talks. You will learn more about these safety and health talks. (You will learn more about these safety and health training techniques in Lesson 13.)

When you go on a vacation trip, do you take snapshots or slides? And when you get back from your trip, do you show the results to your friends and relatives with appropriate commentary? If you do, you can prepare and present your own safety and health programs. With a regular 35 millimeter slide camera or whatever type of camera you have or can borrow, you can capture vivid pictures in your workplace and elsewhere to illustrate job safety and health points you want to make. Then you can either do the narration yourself as you show the slides or photographs, or you can record the commentary on tape. This procedure isn't really any different, except in content, from what you do when you prepare and show slides or photographs to family, friends, or fellow club members, for example. Don't think of safety and health photograph or slide/sound shows as technical, complex, or beyond your scope - they aren't!

Other specialized means of communication about safety and health include models, mock-ups, movies, videotape, exhibits, and displays. Many of these, like the photograph and slide shows discussed previously, you can put together yourself. Others are available, either free or at a nominal charge, from manufacturers, vendors, and suppliers of the equipment, material, and supplies you use in your workplace. In Lesson 14 you will learn how you can get access to these useful communication tools through the safety or purchasing departments in your company.

The best company safety and health programs are those that are the result of active management interest and involvement. Policy and rules to guide the company's complete program for safety and health are a demonstration of management's involvement in the program. A policy statement, signed by the senior management representative, widely publicized in the company, and converted into action plans is evidence of the type of commitment that sets the stage for the success of a job safety and health program. Another step in this process of effective communication and motivation involves the development and use of rules. Perhaps you do not think of rules as tools of COMMUNICATION, but why not? Rules, covering all aspects of safety and health in your operation, communicate to employees the guidelines for your complete program. Telling employees what rules they are expected to follow is one way of making clear to them specifically what job safety and health in your company is all about.

Safety and health rules often include both general rules and those that are specific to a certain department, craft, or operation. As an example, here are some commonly used general safety and health rules that will protect all employees:

- Follow instructions; don't take chances. If in doubt, ask. Be safe and healthy, not sorry.
- If you see conditions or practices you think might cause employee injury or illness, report them immediately.
- Keep your work area clean and orderly. Disorder is a prime cause of accidents and injuries. Put everything you use back in its proper place.
- Use tools and equipment only for their proper purpose.
- Use, alter, repair or adjust tools and equipment only if authorized.
- Immediately report any accident, regardless of how minor, involving you or your equipment. Get first aid quickly.
- If your job requires personal protective equipment, wear it properly and keep it in good condition.
- Avoid horseplay - it is distracting and dangerous.
- Learn to lift correctly; then when you do lift, do it the right way.
- Obey all rules and regulations applicable to your job, including signs of warning, caution, and instruction.

Rules must be thought out, spelled out, and carried out. Simply posting them will not guarantee that they will be carried out. Communication, motivation, and discipline are required. When most people think of discipline, they think in terms of reprimanding, scolding, threatening, and punishing, but this is just one side of the coin - the negative side. The positive, constructive side of discipline is the viewpoint that, in its broader sense, discipline is training and assistance which develops self-control, orderliness, and efficiency. Positive, constructive discipline emphasizes POSITIVE INCENTIVES such as praise, recognition, and other forms of reward. Positive discipline is the method that meets the needs of people, results in satisfaction, and MAKES EMPLOYEES WANT TO COOPERATE. This positive, constructive approach to discipline is based on some of the newest, soundest research into human behavior; it is a practical application of proven psychological principles and techniques.

Supervisors can INFLUENCE job safety and health BEHAVIOR by either positive or negative discipline. Negative discipline, such as punishment, will influence behavior, but can also cause resentment. The use of punishment, threats, and blame can cause frustration and anger. This does not mean that you should never use negative discipline. Sometimes it is necessary. If a rule violation calls for a warning, suspension, or discharge, for example, then the person who violates the rule should be warned, suspended, or discharged. If a rule is not enforced, it really is not a rule. On the other hand, supervisors can accomplish a great deal through positive, constructive discipline by:

- assisting, guiding, and training employees in the safe and healthful way of doing things
- helping employees to understand why safety and health rules are necessary

- showing employees that good discipline means job security
- letting every employee know what is expected and what will happen if a person fails to do what is expected
- building a team spirit in which employees are proud of their group's good job safety and health reputation and work hard to keep it good
- being consistent and fair in handling people who break the job safety and health rules

7. If a supervisor gives praise and recognition for the good safety and health performance of employees, including written commendations for personnel records, the supervisor is practicing _____ _____ discipline.

   a. Positive

   b. Negative

Previous lessons have discussed the advantages of taking action to PREVENT injuries and job-related illnesses from occurring. You are also familiar with the practice of preventive maintenance which involves inspection, servicing, and repair as needed of an item before it malfunctions in order to prevent malfunctioning. The idea behind PREVENTIVE DISCIPLINE is similar. Preventive discipline means trying at all times to prevent violations of company rules from occurring so that negative discipline will not be necessary.

Here are a few pointers on how to prevent violations of job safety and health rules:

- make certain that you know what the company's job safety and health rules are, that you understand them, and that you know why they are necessary
- then be sure that EMPLOYEES know what the company's rules are, that THEY understand them, and that THEY know why they are necessary; show employees why observance of these rules is in THEIR interest
- instruct employees in the proper work methods and practices
- give simple, clear, understandable orders which employees will not mistake
- if an employee is not performing a particular job satisfactorily, consider whether the employee might be able to perform adequately on some other job
- before you take corrective action in the case of an employee, ask yourself this question: Have I given this employee the consideration I would believe was fair if I were in the employee's seat?

If a supervisor has reason to believe an employee is going to violate a job safety or health rule, but takes no action and lets the violation occur. . .

8. The supervisor is not practicing _____ discipline.

When disciplinary action does have to be taken, it is a good idea to analyze the case and see what really happened and how it might have been prevented. You should ask yourself in each case, "What could I have done to prevent this offense?" and "What can I learn from this disciplinary case to help me prevent similar

ANSWERS TO QUESTIONS:

7. a. Positive. Any kind of REWARD for desirable job safety and health behavior which you want to encourage employees to continue to perform is positive, constructive discipline.

8. Preventive. Preventive discipline would involve trying to get the employee on the right track before trouble develops.

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violations of job safety and health rules in the future?" You should especially look for conditions and contributing factors such as:

- poor communication
- failure to motivate the employee
- poor instructions
- inadequate training
- failure to create a warm work atmosphere
- employee placed in wrong job
- poor working conditions
- failure in detecting early warning signs
- excessive tolerance of poor conduct
- lack of foresight
- playing favorites
- treating employee like machine

If one of these contributing factors was involved, you CAN and SHOULD do something to improve the condition.

So far in this lesson we have discussed the necessity for familiarizing your employees with the provisions of the OCCUPATIONAL SAFETY AND HEALTH ACT so that they understand the law and the responsibilities of both the employer and employee.

To promote the best safety and health programs for your workplace, you must communicate with the employees. Communication techniques include certain principles; i.e., REPETITION, SPECIFICITY and RELEVANCE.

The effective presentation of these principles in your safety programs can be enhanced by using bulletin boards, slide programs, publications, such as company newsletters and pamphlets and company rules and regulations, properly enforced.

DISCIPLINE, required to make your programs effective, has been analyzed insofar as three types are concerned: negative, positive and preventive.

The remainder of this lesson is designed to help you in learning about various types of meetings with employees and how to conduct them. In addition, some principles and methods of MOTIVATING employees will be described.

JOB SAFETY AND HEALTH MEETINGS

9. A good technique you can use to communicate with the employees you supervise about job safety and health is to hold regular safety and health meetings. SHORT meetings held frequently are better than long meetings held at greater intervals. Based on this rule, which of the following will be more effective?

   a. a 15-minute meeting each week

   b. a 1-hour meeting each month

10. The best time to hold a weekly safety and health meeting is at the beginning of the first scheduled shift of the week. Of the reasons listed below, check which three are good reasons for having a safety and health meeting at the beginning of the week?

    a. to get employees off on the right foot ____

    b. to counteract the distractions of the weekend ____

    c. to get the maximum benefit from the meeting during the coming work week ____

    d. to fill in any slack time you and employees may have on the first day of the work week ____

11. For a 15-minute safety and health meeting, you should select ONE TOPIC. Supervisor A decided to have a meeting about the need for wearing gloves when handling certain materials. The supervisor brought to the meeting the gloves that should be worn and the materials that required gloves in order to be handled. The gloves were passed around at the meeting, and the materials were arranged so that everyone could see them. Was Supervisor A sticking to one topic at the meeting?

    a. Yes

    b. No

12. Encourage employees to PARTICIPATE in safety and health meetings. Ask for their opinions and suggestions. Find out if any of them have examples from their own experience on the subject of the particular meeting. If the employees at the meeting want to make comments, you should consider this to be evidence of:

    a. their interest, attention, and concern

    b. the fact that you have lost control of the meeting

ANSWERS TO QUESTIONS:

9. a. A SHORT meeting is easier to fit into the work schedule and is just the right length of time to hold employees' attention.

10. a. b. c.
A short meeting at the beginning of the work week will focus everyone's attention on safety and health throughout the week.

11. a. Yes. Concentrating on the one subject of wearing gloves for handling hazardous materials is the best way to impress that particular point on employees' minds.

12. a. Their interest, attention, and concern.
People who are bored and disinterested will not have anything to say because they will not be involved or thinking about the subject of the meeting! Whenever your meetings generate questions and comments, you are making excellent progress.

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13. Supervisor A wants to have a series of 15-minute safety and health meetings, to cover a single subject at each meeting and to encourage participation of employees at the meetings. Which two practices will help accomplish all three objectives?

    a. have longer meetings

    b. discourage discussion

    c. schedule 10 minutes of presentation and 5 minutes of discussion (or vice versa)

    d. arrange to be contacted after the meeting about other subjects

There are various techniques you can use in your safety and health meetings to help employees visualize what you are talking about. These techniques are called VISUAL AIDS. Visual aids get employees' attention and help them understand and remember your message. In addition to slides and photographs, which were discussed previously, you can use movies or models as visual aids. You can also use actual equipment, tools, or materials. Following is an example of this technique.

Supervisor A held a meeting on the subject of unsafe small hand tools. The supervisor brought to the meeting a hammer with a cracked handle and a chisel with a mushroomed head and passed the tools around. He explained the different kinds of injuries that could occur because of the poor condition of the tools. He discussed a recent accident in their workplace that had been caused by an unsafe hand tool. He told the employees what to do if one of their hand tools became damaged. Supervisor A was using unsafe tools as a visual aid. This technique is very effective because the employees are using the tools every day, and it also indicates the supervisor's concern for their safety.

Supervisor B built a cardboard model of the materials handling area to use in a meeting about aisles, passageways, housekeeping, and work flow. The supervisor was recreating a real-life situation in the form of the model. Again, the employees were easily able to identify THEIR work area and the significance of the demonstration.

To maintain interest and avoid boredom, vary the presentation methods you use in your job safety and health meetings. For example, you can alternate presentation methods by using slides with a tape-recorded commentary at one meeting, and photographs of unsafe conditions at a third meeting. If you show a movie

ANSWERS TO QUESTIONS:

13. c. and d.
    By encouraging employees to stick to one subject at a meeting but to come around later to talk about other things, it is possible to cover the chosen subject in a short meeting and at the same time not discourage employees from speaking up.

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and have a guest speaker the next week, you are varying the presentation method so that the employees will look forward to these discussions.

In addition to using visual aids and a variety of presentation methods, you can add interest to safety and health meetings by having them at different locations. The subjects of the meetings will give you ideas for different locations.

- A meeting about the care and replacement of machine guards should be held in the machine shop. Since the machine shop is the place where machine guards are installed and used, it is the logical place for a meeting about machine guards.

- A meeting about emergency first aid should be conducted in the dispensary. Since the dispensary is the place where medical treatment would be performed if an employee were injured, it is the logical place for a meeting about first aid.

SAFETY AND HEALTH MEETINGS ABOUT FEDERAL STANDARDS

A good way to communicate the contents of the Act and the OSHA standards is to have a series of safety and health meetings about the particular OSHA standards that apply to your workplace. Some of the subjects covered in the OSHA standards are listed on the last three pages of this lesson.

The OSHA standards are changing. All revisions will appear in the FEDERAL REGISTER and in its annual summary involving job safety and health, which is entitled CODE OF FEDERAL REGULATIONS 29 LABOR PART 900 to end.

The supervisors in Organization X are having a series of 15-minute weekly safety and health meetings about the OSHA standards that affect their workplaces.

The first week, Supervisor A brought two grinding wheels, a new one and a broken one, to his meeting. He explained the proper way to check, install, use, and maintain this type of wheel. He discussed the hazards of exploding wheels and the need for correct use of guards, protective equipment, and work procedures

Supervisor B brought several cardboard boxes to his meeting and demonstrated the difference between proper and improper stacking techniques. He used this demonstration to lead into a discussion of good housekeeping practices.

Supervisor C brought a respirator and a variety of cartridges to her meeting. She discussed the selection, use and care of these devices for protection from dust, fog, fumes, mist, gases, smoke, sprays, and vapors.

14. Match the description of each safety and health meeting in Column A with the STANDARD in Column B, which was the subject of the meeting:

Column A	*Column B*
a. Supervisor A displayed new and broken grinding wheels	• Standards for Grinding, Polishing, and Buffing Operations
b. Supervisor B used boxes to demonstrate stacking techniques and discussed housekeeping	• Standards for Housekeeping
c. Supervisor C displayed a respirator and cartridges	• Standards for Respiratory Protection

At his second safety meeting, Supervisor A displayed a pair of damaged safety glasses that has saved the eyesignt of an employee. He described the accident and let everyone see the results of the impact the glasses had absorbed and imagine what would have happened if the employee's eyes instead of the glasses had been hit.

At his meeting, Supervisor B displayed a large white posterboard on which were painted big patches of color - red, orange, yellow, green, blue, purple, and black. He explained what each color meant when used as a hazard marking and asked employees to report at the next week's meeting areas which needed better safety and health hazard color code marking.

Supervisor C brought an emergency lockout tag to her meeting. She explained the system of emergency tags used in the organization and described what might happen if an employee were repairing untagged equipment but were not visible from the controls of the equipment, for example. She made sure that employees knew what to do if they found lockout tags on valves or switches and explained the special procedures and precautions that should be followed.

15. Match the description of each safety and health meeting in Column A with the standard in Column B which was the subject of the meeting:

Column A	*Column B*
a. Supervisor A displayed a pair of damaged safety glasses which had saved an employee's eyesight	• Standards for Color Codes for Marking Physical Hazards
b. Supervisor B used big patches of colors on posterboard to illustrate safety and health hazard color coding	• Standards for Eye and Face Protection
c. Supervisor C displayed an emergency lockout tag and explained what employees should do when they see such tags on valves or switches.	• Standards for Accident Prevention Signs and Tags

The third week, both Supervisor A and Supervisor B used the same standard as the subject of their safety meetings. Supervisor A asked employees to describe, without looking around, the locations of the fire extinguishers in their work area and what kind of fire each of the extinguishers was intended to fight. Since

ANSWERS TO QUESTIONS:

14. a. Grinding, Polishing, and Buffing Operations
    b. Housekeeping
    c. Respiratory Protection

15. a. Eye and Face Protection
    b. Color Codes for Marking Physical Hazards
    c. Accident Prevention Signs and Tags

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not everyone could answer the questions, he took the employees on a fire extinguisher tour, stopping at each of the area extinguishers and explaining how the extinguisher operated and what kinds of fire it would extinguish.

Supervisor B brought a small box of bicarbonate of soda to his meeting. He explained to employees that the sodium bicarbonate will put out a fire in a flaming frying pan or in an automobile engine, for example. He told them that sodium bicarbonate is also used as the base chemical in most dry chemical fire extinguishers and discussed various types of fire extinguishers.

Supervisor C brought to her meeting a portable electric power tool with a frayed cord. She explained how this kind of defect can electrocute the user who touches the cord, especially if the user is also touching metal piping or standing in water. She told the employees about the safety checkout procedure for hand power tools that they were to begin using to assure that tools were checked by employees before use.

16. The meetings of Supervisors A and B were about the _____ standards.

17. The meeting of Supervisor C was about the _____ standards.

    a. Electrical

    b. Fire protection

MORE IDEAS ABOUT VISUAL AIDS

The preceding items contain some examples of how supervisors used visual aids in their weekly safety and health meetings. These ideas and a number of others which you might want to use follow.

IDEAS FOR USING VISUAL AIDS IN SAFETY AND HEALTH MEETINGS

- Protection is the name of the game, whether it's a fence around your yard or a guard around a machine. They both serve a useful purpose. Use a PIECE OF CHICKEN WIRE as a point of discussion on the value of guarding. Just as the chicken wire can protect your home from intruders so the various machine guards used around the company can protect you from serious injury. Ask employees to report any that are being bypassed or removed, or any dangerous situation which should be guarded but is not. You may be surprised at the knowledgeable answers you get. (Machinery and Machine Guarding Standards are found in Part 1910 Subpart O.)

- Bring in an ARM CAST or LEG CAST that you have obtained from the local hospital, or from an acquaintance who recently had to wear it. Ask the employees why people have to wear these sorts of things. If any of them have worn a cast, have them tell some of the ways it was inconvenient, uncomfortable, restraining, or disadvantageous. Discuss accidents involving slips, trips, falls, and broken

ANSWERS TO QUESTIONS:

16. b.

17. a.

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bones. Have employees identify hazards in their workplaces that could cause such accidents and suggest ways to eliminate them.

- Bring an ARROW to the meeting. Ask the employees if they would stand in front of an archer who was shooting that arrow. A silly question? Maybe not. After all, many shops have equipment which potentially can throw off chips or other flying particles of various kinds. Standing in front of these machines without the necessary protective equipment could be as dangerous as standing in front of an archer. (Protective Equipment Standards are found in Part 1910 Subpart 1.)

- Display one or more V-BELTS. Discuss their importance as machine driving forces. Then discuss their hazard potential, and the driving forces in people that lead them to unsafe acts regarding V-belts - resulting in cuts, bruises, and finger amputations. Ask employees for preventive action suggestions.

- Put your fingers in a loaded RAT TRAP? Not likely. Pull back the spring on the trap; and, after your fingers are in a safe position, let it fly. You'll certainly get everyone's attention when it slams shut. But more important, you can equate the rat trap with the very real and very dangerous hand traps in the area. The point: think of every unsafe position for your hands as a possible rat trap and watch your fingers; they have to last a lifetime. Make a survey of your business, pointing out all potential hand traps.

- A few spools empty of thread strung along a rubber band make an excellent MODEL OF THE HUMAN SPINAL COLUMN. This model can be used to illustrate the danger of moving an injured person, when the spinal column should not be flexed. When the spools at either end are lifted the row will bend in the middle, simulating the flexing of the spinal column when an injured person is picked up without proper support. Moving a person with a broken back could sever the vital spinal cord. Similarly, the spools can be used to illustrate how little supporting strength the flexible backbone has when lifting unless it is in an almost verticle position.

- Exhibit two GRINDING WHEELS, a new one and a broken one. Have dialogue about the proper way to check, install, use, and maintain this type of wheel. Review the deadly hazard of exploding wheels and the need for consistent and correct use of guards, protective equipment, and work procedure.

- The heart pumps a full five quarts of blood every 60 seconds. The loss of one quart, a scant two pints, creates a very serious medical problem. The danger of severe and rapid bleeding can be dramatized by using a CARTON OF WATER, COLORED RED WITH VEGETABLE DYE. Pour the contents of the carton into a clear quart milk bottle while pointing out that the loss of this much blood is life-threatening. After you've made your point, show your listeners how to stop severe bleeding with direct pressure on the wound.

- Bring a SPARE EMERGENCY OR LOCKOUT TAG to your meeting. Explain the system of emergency tags used in your company. Make certain that each employee knows what to do if there is a tag on a valve or switch. Explain any special procedures or precautions that should be followed. (Standards for Accident Prevention Signs and Tags are found in Part 1910 Subpart J.)

- Bring in a respirator and a variety of cartridges. Discuss the major guidelines for selection, use and care of these devices for protection from occupational diseases related to harmful dusts, fogs, fumes, mists, gases, smokes, sprays or vapors. (Respiratory Protection Standards are found in Part 1910 Subpart I.)

- A ten-cent BOX OF SODIUM BICARBONATE might well be the world's best bargain. It will put out a flaming frying pan or auto engine fire with equal ease. Sodium bicarbonate is so good, it is used as the base chemical in most dry chemical fire extinguishers. Moreover, it is a first aid kit with few equals. Mixed with petroleum jelly it can take the bite out of a bee sting. Mixed with water (several teaspoonfuls per half glass of water) and given in large amounts, it will induce vomiting in a poisoning victim. The same mixture, in less quantity, serves to neutralize a strong acid poison. For shock victims (when medical care is delayed), give a mixture of 1/2 teaspoon salt and 1/2 teaspoon bicarbonate of soda in a half glass of water at 15-minute intervals.

- A HAMMER WITH A CRACKED HANDLE, a CHISEL WITH A MUSHROOMED HEAD, or any similar defective tool used in your work is an excellent visual contact for a talk on hand-tool safety. Bring the tools to the meeting, and pass them around. Explain the different kinds of injuries that could occur because of their poor condition. If an accident has already occurred, feel free to discuss it, especially if one of your own crew was injured. Tell the employees what to do when one of their hand tools becomes damaged.

- Bring in several relatively small CARDBOARD BOXES. Demonstrate the dramatic difference between proper and poor piling. Use this as a lead-in for highlighting key points of good housekeeping in storage areas. (Standards pertaining to housekeeping are found in Part 1910 Subpart D.)

- Can a good first aid kit be made for a dollar or two? Yes, indeed. A few yards of unbleached muslin cut into TRIANGULAR BANDAGES afford as much protection from severe bleeding and related injuries as many expensive commercial first aid kits. These triangles of 1/2 square yard can be folded into one of the most useful bandages known: the cravat. Consult your company doctor or the Red Cross First Aid handbook for details. Remind your listeners that this lifesaving bandage can be kept in the car glove compartment as well as in the home.

- Bring in a DART OR TWO AND A SMALL TARGET. Ask for a volunteer to stand in front of the target while you fire off a dart. When people tell you you're crazy, you can tell them you're no more crazy than employees you've seen standing without eye protection in front of grinders, chippers, or whatever other machinery you have. After all, a chip can blind as easily as a dart. Discuss all aspects of eye safety with the employees. (Standards for eye and face protection are found in Part 1910-Subpart I.)

- Use a large piece of WHITE POSTER-BOARD WITH BIG PATCHES OF COLORS on it, (red, orange, yellow, green, blue, purple, black). Ask the employees what each color means, as a hazard marking. Ask them to report, in the next meeting, areas needing better utilization of safety color coding. (Standards on safety color code for marking physical hazards are found in Part 1910 Subpart J.)

- Find an electric tool or appliance with a FRAYED CORD. Explain that this kind of defect can kill and should be reported. A person touching this cord could be electrocuted, especially if the

person were touching metal piping or standing in water. At this time you may want to start a safety check-out for hand power tools. The tools should be carefully checked by each employee before they are used. (Electrical Standards are found in Part 1910 Subpart S.)

- SAFETY GLASSES THAT SAVED SOMEONE'S SIGHT tell a compelling story, especially if that someone works for you or works in your business. Bring the safety glasses to the meeting and tell the facts about the accident. Let everyone see the impact they absorbed. Those with vivid imaginations can guess what the result would have been if the eye, instead of the glass, had been hit. Many companies have chapters of the Wise Owl Club (membership restricted to those who saved their sight through eye protection.) If yours does, arrange to have a member give a short talk on eye protection.

- Ask your employees, without looking, to tell the location of the FIRE EXTINGUISHERS; and, if they can, which kind of fire each of the extinguishers will fight. If not everyone can answer the questions, take this opportunity to take everyone on a "Cook's tour." Stop at each of the area extinguishers, and explain to each of the employees how they operate and what kinds of fires they can put out. (Fire protection standards are found in Part 1910 Subpart L.)

- "Three minutes to live" is a frightening thought, but it's also the realistic outlook for the accident victim who is not breathing. After three minutes of not breathing, chances of revival decline rapidly. A THREE-MINUTE EGG TIMER can be started at the beginning of your talk to show how quickly three minutes can pass. Use this device to open a talk on the correct method of mouth-to-mouth resuscitation. Accurate instructions can be found in the American National Red Cross First Aid handbook.

- Use a STEPLADDER, a stool, and a wooden crate as aids for a discussion of "steps to ladder safety." Emphasize that no one should risk a broken neck by climbing up on furniture or equipment. Step up to safety by proper use of the right kind of ladder. (Standards for ladders are found in Part 1910 Subpart D.)

- See if you can find an old PIECE OF LUMBER with a big RUSTY NAIL sticking through it. Bring it to your meeting and show it to your employees. The danger is that the puncture inflicted by this nail may be filled with millions of tetanus germs. Without proper cleaning, medical treatment, and possibly a tetanus shot, the wound could become infected, with deadly lock-jaw the possible result. Remind employees to remove these nails or to bend them over. Well-built shoes with sturdy soles are another good precaution.

- A chain is only as strong as its weakest link. Bring a DEFECTIVE CHAIN to your meeting and show it to your employees. Remind them that because their lives may be resting on the strength of that weakest link, they should inspect each chain before using it. Look for: 1) bent links, 2) cracks in weld areas, 3) transverse nicks and gouges, 4) corrosion pits, 5) stretched links. Specific information on chain usage can be found in chain manufacturers' catalogs or in National Safety Council publications.

This chart will help you in your safety meetings. Read the five principles involved, and then turn to the next page.

Practice the 5 P's for successful safety talks*

Prepare ► Think safety. Write things down for your idea bank. Read safety materials selfishly. Listen to others' ideas and attitudes. Organize and outline your talks. Practice.

Pinpoint ► Don't try to cover too much ground. Concentrate on one safety rule, one first aid hint, one unsafe practice, one main idea—a communication bull's-eye.

Personalize ► Establish common ground with your listeners. Bring it close to home. Make it important in their minds. Make it personal and meaningful to them.

Picturize ► Create clear mental pictures for your listeners. Appeal to both their ears and their eyes. Help them really "see what you mean." Use visual aids, like those suggested in this booklet.

Prescribe ► In closing your safety talk, answer the question the listeners always have—"So what?" Tell them what to do. Ask for special action. Give a prescription.

Using the "Five 'P' Approach" in safety and health meetings will do much to make them interesting and meaningful. This practical and proven communication technique consists of five things you can do to make any safety or health communication more effective and more interesting - Prepare, Pinpoint, Personalize, Picturize, and Prescribe.

Match each set of directions in Column A with one of the five Ps listed in Column B.

Column A		*Column B*
18. organize and outline your talks	____	a. prescribe
19. don't try to cover too much ground; concentrate on one specific problem	____	b. picturize
20. establish common ground with your listeners; talk about a specific problem that applies to the jobs of the employees in the meeting	____	c. personalize
21. create mental pictures for your listeners; use visual aids	____	d. pinpoint
22. tell your listeners what to do; suggest specific solutions for problems in their workplace	____	e. prepare

21

ANSWERS TO QUESTIONS:

18. e. 19. d. 20. c.

21. b. 22. a.

MOTIVATION

In addition to using good communication techniques, you need to apply the basic principles of motivating people to get employees to enthusiastically comply with safety and health standards. What exactly is motivation? How does it work? Everyone has had experiences in particular situations of knowing what must be done, how to do it, why it is being done, and what the results are going to be - and WANTING TO ACHIEVE THOSE RESULTS. These are the times when a person is MOTIVATED! Motivating employees means helping them to feel this way about achieving job safety and health and about thinking and performing in a safe and healthful manner. Motivation is a positive thing. MOTIVATING OTHERS MEANS INSPIRING, ENCOURAGING, AND MOVING THEM TO ACTION; it means creating the climate and conditions that are conducive to willing and enthusiastic achievement of goals. Motivation means getting the desired results in terms of job safety and health performance by energizing your employees. It's not as difficult as you may think, but it does take a basic understanding of certain motivational principles which will be explained in the following items.

23. One basic principle of motivating people is the principle of RECIPROCAL INTEREST. This means that the employees you supervise will be motivated to accomplish the results you want TO THE DEGREE you show interest in the results they want. The employees are more likely to cooperate in meeting the goal of eliminating job safety and health hazards if you show them you are interested in _____ .

24. A second motivational principle is the principle of PERSONAL PARTICIPATION. This means that if you can get the employees you supervise personally involved in the safety and health program, it will INCREASE their motivation. To apply the principle of personal participation, which one of the following actions would you take?

    a. ask the employees for their ideas and suggestions about eliminating job safety and health hazards

    b. tell the employees what you have decided they must do to reduce hazards

25. When employees have a feeling of proprietorship about the job safety and health program and exert extra effort to make THEIR ideas, THEIR plans, THEIR decisions, and THEIR project a success, the motivational principle of _____ _____ has been effectively applied.

    a. personal participation

    b. reciprocal interest

ANSWERS TO QUESTIONS:

23. Helping them do a good job without getting hurt or damaging their health. No employee is likely to be disinterested in protecting personal well-being while maintaining productivity.

24. a. Ask employees for their ideas and suggestions about eliminating job safety and health hazards. Even though you may know what needs to be done, if you encourage employees to make suggestions, they will feel more involved - and you may get some good ideas you haven't thought of! Even though the actions and rules you decide on are good ones, employees will be more likely to cooperate if they feel they have had SOMETHING TO SAY ABOUT what the actions and rules are to be. Employees might even suggest more stringent rules than those you had in mind!

25. a. Personal participation. Getting employees to take a real part in a safety and health program not only assures their cooperation, but makes for a better program.

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26. A third principle of motivation is the principle of PERSONAL RECOGNITION. This means that the employees you supervise will be more highly motivated to make the safety and health program work if they know THEIR EFFORTS ARE APPRECIATED. When you give the employees credit for their contributions to a project, you are applying the motivational principles of _____ .

    a. personal recognition

    b. personal participation

    c. reciprocal interest

27. Which of the following actions is an application of the motivational principle of personal recognition?

    a. praising an employee for a hazardous job safely done

    b. criticizing an employee for doing something unsafe or hazardous to health

28. If no notice is taken of an employee's good job safety and health performance and as a result the employee loses enthusiasm for supporting the employer's program, this would be an example of _____ application of the motivational principle of personal recognition.

    a. successful

    b. faulty

29. When you prepare a written commendation for an employee's personnel folder saying the employee is doing a good job of meeting safety and health standards, you are using the motivation principle of _____ _____ .

    a. personal participation

    b. personal recognition

    c. reciprocal interest

ANSWERS TO QUESTIONS:

26. a. Personal recognition. It takes little effort on a supervisor's part to praise an employee for a safe or healthful action on the job and it has a very beneficial effect on the employee's motivation.

27. a. Praising an employee for a hazardous job safely done. A supervisor needs to be very careful to balance necessary criticism with deserved praise so as not to discourage employees from trying to perform work in a safe and healthful manner.

28. b. Faulty. One of the easiest things you can do to motivate employees is to observe when they do a good job and TELL them so!

29. b.

A practical tool for motivating hazard-free behavior is a job safety and health suggestion program. In a safety and health suggestion program, employees are encouraged to submit ideas for reducing or eliminating job safety and health hazards. Employees whose suggestions are adopted receive recognition and awards.

30. For a job safety and health suggestion program to be an effective motivator, the suggestions which are submitted must be followed up IN A TIMELY FASHION. Supervisor A has a safety and health suggestion program set up so that a committee evaluates suggestions once a month, reports back to the employee who submitted the suggestion, and gets prompt implementation of suggestions where practical. Supervisor B runs a safety and health suggestion program by filing suggestions and evaluating them every six months. Which supervisor is more likely to have an effective safety and health suggestion program?

    a. Supervisor A

    b. Supervisor B

Another motivating tool you can use is a job safety and health awards program. Employees who consistently excel at performing hazardous jobs in a safe and healthful manner or who make unusual or significant contributions to job safety or health, such as a simple and clever solution to a very hazardous problem, or clear-headed and resourceful action in a moment of crisis, can be SINGLED OUT for safety and health awards.

If you decide to have a safety and health awards program and want to be sure it is an effective motivator, consider presenting awards to recipients in a special way. Photographs of job safety and health award winners and publicity in company or local newspapers help to make awards special. Having the award recipient's family, supervisor, fellow employees, and community representatives present at the award presentation ceremony is an example of giving an award in a special way and makes the recipient feel it is something of value!

ANSWERS TO QUESTIONS:

30. a. Supervisor A. When you take prompt action on suggestions, there will be more of them forthcoming!

APPLYING A MOTIVATIONAL PRINCIPLE

31. When you arrange for employees who earn safety and health awards to get recognition in a special presentation ceremony, you are applying the motivational principle of _____ _____.

    a. reciprocal interest

    b. personal participation

    c. personal recognition

    d. communication

As a supervisor, LEADERSHIP IS YOUR JOB. It is supervisors like you who must lead the way to safety and health on the job. Your leadership job demands a great deal in the way of knowledge, skills, and attitudes. It is essential that you know the law and the safety and health standards applicable to your workplace, that you know the basic principles of occupational safety and health, and that you know your organization's job safety and health policies, procedures, and practices. Among the vitally important skills you must use are skills of communication and motivation. These skills are essential for imparting safety and health knowledge, building good safety and health attitudes, improving employees' skills of safe and healthful workmanship, and developing employee habits that MAKE JOB SAFETY AND HEALTH A WAY OF LIFE!

LIST OF SOME OF THE SUBJECTS COVERED IN OSHA STANDARDS FEDERAL REGISTER PARTS 1910-1926

- A -

Abrasive blasting
Abrasive wheel machinery
Accident prevention tags
Acetylene
Air contaminants
Anhydrous ammonia, storage and handling of
Appliances (electric)
Arc welding and cutting equipment
Automatic sprinkler systems

- B -

Bakery equipment
Biological hazard tags
Blasting abrasive
Blasting agents and supplies storage of
Boatswain's chairs

- B - (Cont'd)

Booths, spray
Buffing and polishing wheels

- C -

Cables, flexible electrical
Carbon dioxide extinguishing systems
Caution signs
Chemical toilet specifications
Color code for marking physical hazards
Compressed gas and compressed air equipment
Compressed gas cylinders, inspection of
Compressed gases
Cooperage machinery
Cranes, overhead and gantry
Crawler locomotive and truck cranes

ANSWERS TO QUESTIONS:

31. c.

- D -

Danger signs
Degreasing
Derricks
Dip tanks containing flammable or combustible liquids
Dusts

- E -

Egress, means of
Electrical
Electrical cords and cables, flexible
Electrical protective devices
Environmental control, general
Exit marking
Explosives and blasting agents
Eye and face protection

- F -

Fire extinguishing systems
  Automatic sprinkler systems
  Carbon dioxide systems
Fire protection
First aid, medical services and
Fixed ladders
Flammable and combustible liquids
Flexible cords and cables (electrical)
Foot protection, occupational
Forging machines
Fumes

- G -

Gantry cranes
Garaging LP-Gas-Fueled vehicles
Gas mask canisters, identification of
Gas regulation and mixing equipment
Gases
General environmental controls
Grinding, polishing, and buffing operations
Grounding (electrical)
Guarding, machinery, and machine
Guarding of portable powered tools
Guillotine-type cutters

- H -

Hand and portable powered tools and equipment
Hazard tags, biological
Hazardous locations (electrical)
Hazardous materials
Head protection, occupational
Housekeeping
Hydrogen
Hydrostatic tests

- I -

Immediate evacuation warning signal
In-plant traffic signs
Ionizing radiation

- J -

Jacks
Junction boxes and fittings

- K -

Ketene (Threshold Limit Value)
Kiers
Kiln tender room

- L -

Ladders
  Mason's ladder
  Portable metal ladders
  Portable wood ladders
Laundry machinery and operations
Liquefied petroleum gas as a motor fuel
Liquefied petroleum gases storage and handling of
Liquids, flammable and combustible
Logging, pulpwood
Longshoring
Lower explosive limit of some commonly used solvents
LP-Gas in buildings
Lunchrooms

- M -

Machinery and machine guarding
Manlifts
Mason's ladder
Materials handling and storage
Mechanical power presses
Mechanical power-transmission apparatus
Medical services and first aid
Mills and calenders in the rubber and plastics industries
Mists

- N -

Nitrous oxide
"No Smoking" signs
Noise exposure, occupational
Nonionizing radiation

- O -

Occupational foot protection
Occupational head protection
Occupational noise exposure
Open surface tanks
Overcurrent protection (electrical)
Overhead and gantry cranes
Oxygen (as liquid or compressed gas)

- P -

Painting, spray
Permissible noise exposures
Personal protective equipment
Polishing wheels, buffing and
Privy specifications
Portable fire extinguishers
Portable metal ladders
Portable power tools
Portable wood ladders
Power lawnmowers
Power tools
Powered industrial trucks
Pulp, paper and paperboard mills
Pulpwood logging

- Q -

Quinone (Threshold Limit Value)

- R -

Radiation standards for mining
Radiation symbol
Radiation warning signs
Rag cookers
Resistance welding equipment
Respiratory protection

- S -

Safety belts and lifelines
Safety instruction signs
Safety shoes (foot protection)
Sanitation
Sawmills
Scaffolding
Shipbuilding
Signs and tags, specifications for accident prevention
Slow-moving vehicle emblem
Spray booths
Spray cleaning and degreasing
Spray finishing using flammable and combustible materials
Spray rooms, design and construction of
Stairway railings and guards
Standpipe and hose systems
Storage of explosives, American table of distances for

- T -

Temporary labor camps
Textiles
Toilet facilities
Toilet specifications, chemical
Transformers
Transportation of explosives
Transportation of packaged blasting agents
Threshold Limit Values

- U -

Use of explosives and blasting agents
Use of respirators agents
Use of respirators

- V -

Vapor degreasing tanks
Vapors
Vehicle, emblem, slow moving
Vehicle-mounted work platforms
Vent line diameters
Ventilators

- W -

Walking-working surfaces
Warning signs, radiation
Washroom machines
Water gel (slurry) explosives and blasting agents

- W - (Cont'd)

Welding and cutting equipment, arc
Welding, cutting, and brazing
Welding equipment, resistance
Window-jack scaffolds
Woodworking machinery requirements
Work platforms, vehicle mounted

- X -

X-ray inspection of welded, piping joints
X-rays (ionizing radiation)

- Y -

Yellow (safety color code)

- Z -

Zinc (welding or cutting)

LESSON 13

HOW AND WHEN TO PROVIDE SAFETY AND HEALTH TRAINING

The purpose of this lesson is to show you how and when to provide safety and health training. It is especially directed to employees performing new jobs and how to make and keep them aware of hazards.

The purpose of occupational safety and health training is to make employees aware of the safety and health hazards that they operate under during their working day, as well as how to perform their jobs without endangering themselves or their fellow employees.

The following quotations from the standards are examples of the emphasis placed on safety and health training by the Act:

> CFR 1910.178(1) Powered Industrial Trucks: "only trained and authorized operators shall be permitted to operate a powered industrial truck. Methods shall be devised to train operators in the safe operation of powered industrial trucks."
>
> CFR 1910.217(f)(1) Mechanical Power Presses: "The employer shall train and instruct the operator in the safe method of work before starting work on any operation covered by this section."

Before any employee you supervise starts a job that is new to that employee, it is your responsibility to provide safety and health training for that specific job. This means that safety and health training is required for a new employee, an employee who is changing jobs, a newly created job, or a job that has been changed. You are the best person to provide safety and health training for employees starting jobs new to them because you are the one who is most knowledgeable about the hazards involved in the jobs under your supervision.

Training an employee before work is started on a job gives you a good opportunity to influence the formation of good work habits. With newly hired employees who are beginning their first jobs, you can help them in the formation of safe and healthful work habits that will continue throughout their entire working lives. With newly hired employees who have past work experience, you can get them off on the right foot with your employer. With experienced employees who have been assigned to new jobs, to newly created jobs, or to changed jobs within the organization, you can detect and correct unsafe or unhealthful work habits which the employees may not even be aware of.

Providing safety and health training for employees starting jobs new to them is an important supervisory function.

Safety and health training should include the following information:

- the rights and responsibilities of employees under the Act, including conduct on the part of EMPLOYEE that may be necessary to comply with an OSHA Standard
- first aid and emergency procedures
- the need to report all events resulting in injury, illness, or property damage, as well as near misses
- the need to report hazardous conditions and practices
- company and departmental safety and health rules and how they apply to the employee's job

- the specific hazards of the employee's job and how to avoid them
- the procedures, precautions, safeguards, and personal protective equipment necessary to protect the employee from the hazards of the job

As you will note from the preceding, safety and health training for a new employee includes the three Rs: rights, responsibilities, and rules.

- Teaching a new employee his or her RESPONSIBILITIES under the Act
- Teaching a new employee his or her RIGHTS under the Act
- Teaching a new employee the general and departmental safety and health RULES of the company

You should also teach employees starting jobs new to them about the OSHA safety and health STANDARDS that apply to their jobs.

Safety and health training should also include information about action to be taken in the following emergency situations:

- what to do if the employee or a fellow employee is seriously injured or develops severe symptoms of illness
- how and when to evacuate the building rapidly
- how and when to give a fire alarm to fellow employees, report a fire to the local fire department, and use portable fire extinguishers and other available fire fighting equipment
- how and when to shut off electricity, gas, and other special hazards

It is especially important for employees to know what to do in these emergency situations because quick action is required.

Since the employer is responsible for correcting hazards and recording illnesses and injuries caused by occupational hazards, a good training program will include teaching employees to report such conditions and events. Tell new employees about the reporting requirements of the Act. Since regulations promulgated under the Act require your employer to maintain specific information on all recordable injuries and illnesses, you should stress the need for employees to report all job-related injuries and illnesses that occur in their workplaces.

It is a good idea to have employees report ALL injuries and illnesses so that YOU can make the decision as to whether an event is RECORDABLE or not. Then, too, remember that some "near misses" which are not actually recordable have come within mere fractions of being serious enough to count. You can often learn something from a "near miss" that will help prevent the actual thing from happening.

The importance of prompt reporting of hazardous conditions or practices should be explained during the safety and health training you give before the employee starts a new job.

In addition, safety and health training for new employees should include general and departmental safety and health rules.

This may be the employee's first introduction to the safety and health requirements of your establishment. By stressing safety and health in the beginning, the employee will be less likely to make errors when first performing job duties. The employee will also be impressed by the fact that the organization means business about practicing good safety and health procedures.

An effective way to teach employees about safety and health rules is to explain that each rule refers to a hazardous act or condition which experience has shown causes occupational injuries and illnesses.

Describe actual violations of safety and health rules and the accidents and exposures to health hazards that the violations have led to. Tell employees that the rules have been made to PREVENT hazardous acts and conditions which are known to cause injuries and illnesses on the job.

Supervisor A tells a new employee: "Don't use tools, materials, or equipment that are defective (rough, slippery, corroded, frayed, cracked, etc.). Report defects and get them fixed." The supervisor is teaching the new employee about a safety and health rule.

Supervisor B tells a new employee in a chemical plant about the safety and health rule requiring employees to wear goggles when handling chemical solutions. The supervisor describes how an employee, who was not wearing goggles while drawing acid from a drum, splashed some acid in one eye and required emergency medical treatment to save the vision in that eye.

Supervisor B is teaching a new employee a safety and health rule and describing a violation of a safety and health rule and the consequences of the violation.

Telling employees what the safety and health rules are is important in developing job safety and health awareness. However, even when employees are aware that your employer stresses job safety and health, this does not necessarily mean they will be able to figure out how to apply safety and health rules to their own jobs without being taught. Application of general rules to specific job situations doesn't occur automatically. As a part of the training process, you must convert general safety and health rules into SPECIFIC safety and health practices for an employee to apply to a specific job.

Supervisor C tells a new rolling machine operator in a roofing paper factory that the company has a general rule forbidding operators to remove protective guards or devices from machines. The supervisor points out the protective guard on the machine at the point where the roofing paper goes between two rollers. The supervisor explains that the purpose of the protective device is to prevent the operator from getting caught in this nip point and drawn between the rollers. Supervisor C is teaching the new employee how to apply a general safety and health rule to the employee's specific job.

Supervisor D is training a new employee who will work in a petroleum product manufacturing process involving the use of toxic chemicals. The supervisor tells the employee that the department has a safety and health rule forbidding anyone to transfer a chemical from one of the large labelled storage containers into any smaller container that is unlabelled. The supervisor shows the employee several of the small, portable containers and explains how to label them.

The supervisor illustrates the hazards presented by unmarked toxic chemicals by describing what might happen if an employee who knew what was in an unmarked container was interrupted or called away and another employee came upon the hazardous chemical unaware of what it was. Supervisor D is teaching the new employee how to apply a departmental safety and health rule to the employee's specific job.

Now you can see that in addition to teaching a new employee how to apply the general and departmental safety and health rules to the job the employee will do, it is necessary to teach the employee about the

hazards specific to the job and how to avoid them. Safety and health training about a specific job should include the following information:

- instructions about the specific hazards of the new job
- instructions about the specific procedures, precautions, and safeguards necessary to perform the specific job without injury or illness

During training, the safe and healthful method which has been developed for performing each step of the job should be described in detail and the various hazards of the job should be pointed out and described in terms of their relationship to the job steps. One purpose of training is to teach the employee what the hazards connected with a specific job are and how to avoid them. This kind of specific training has been found to reduce the number and severity of occupational accidents and exposure to health hazards.

To be sure you include information about all the hazards of a specific job and how to avoid them, you need the following information:

- the key steps of the job
- the hazards involved in each step
- the safety and health practices the employee must be told and shown
- the safety and health knowledge the employee must acquire

A job analysis like the one discussed in Lesson 4 will provide the necessary information.

The contents of a JOB ANALYSIS were described in Lesson 4. Use the words below to fill in the blanks.

1. As you will remember, a job analysis breaks a job down into a sequence of _____
2. A job analysis identifies the _____ involved in each step.
3. A job analysis describes the _____ which are key factors in performing the job safely and healthfully.

   a. steps

   b. procedures and precautions

   c. hazards

Review the job analysis and make a list of the hazards associated with the job. The following are important components in performing a job in a safe and healthful manner.

- the tools, materials, and equipment being used
- the movements performed by the employee
- the conditions in the surrounding workplace

ANSWERS TO QUESTIONS:

1. a. steps 2. c. hazards 3. b. procedures and precautions

A job analysis may already have been performed as a part of your employer's occupational illness and injury prevention and control program or as part of the normal wage or job survey to set standards for job duties and pay. If so, you can use this existing job analysis to plan the contents of the safety and health training you are going to do. If a job analysis has not been done, it would be desirable for you to perform one, or request that one be performed, using the technique described in Lesson 4.

The job analysis focuses attention on the hazards of the job and aids in developing safe and healthful work procedures and identifying safeguards necessary for hazard-free job operation.

To be sure that all the hazards associated with a particular job are covered in the safety and health training for that job, in addition to consulting the job analysis, refer to reports of injuries and illnesses (discussed in Lesson 3 and 5), and to the facility inspection reports (discussed in Lesson 7).

The safety and health training which you give new employees is most likely to be done on the job. However, in the event you should be called on to teach a formal classroom course, there are a number of publications available which will explain the process of determining the training requirements and training objectives for a course, preparing lesson plans, identifying training aids, etc. Some of these publications are listed under "Training" in the bibliography in Lesson 15.

After you have planned the content of the safety and health training you will do, the next step is to assemble whatever tools and materials are necessary and to arrange the work situation. Below is a list of steps you will perform to get ready to instruct a new employee or an experienced employee on a new job. Use the words to fill in the blanks.

4. Read the _____ _____ .

5. Make a list of the _____ and _____ which are the key factors in safe and healthful performance of the job.

6. Assemble the _____ , equipment, and materials that the employee will use on the job.

7. _____ the work station as you want the employee to keep it.

   a. job analysis

   b. tools

   c. procedures, precautions

   d. arrange

Lesson 5 discussed the importance of putting an employee at ease when conducting an interview about an accident or exposure to a health hazard. It is equally important to put an employee at ease when conducting safety and health training. Begin with an informal conversation about subjects of general interest. This is one way to put the employee at ease.

ANSWERS TO QUESTIONS:

4. a. job analysis

5. c. procedures, precautions

6. b. tools

7. d. arrange

During this initial conversation, it is a good idea to get the employee to tell you what he or she already knows about the job. It is also a good idea to find out if the employee thinks that occupational injuries and illnesses are due to circumstances beyond an employee's control or that an employee can avoid harm by safe and healthful work habits.

Safety and health training specific to the job consists of four steps:

- telling the employee how to do the job safely and healthfully
- showing the employee how to do the job safely and healthfully
- letting the employee do the job while you observe and correct as necessary
- following up the training with observation after the employee begins regular performance of the job to be sure safe and healthful work habits are retained

Each of these steps will be amplified in the remainder of this lesson to stress its importance and help you to administer your own training program.

8. To tell how to do a job safely and healthfully, you will have to tell the employee about the hazards in each step of the job operation. Each time you point out a hazard, explain how to avoid the hazard. Supervisor A is training a new pipefitter in an oil refinery. The supervisor shows the pipefitter which pipelines carry caustic substances and indicates what caustic substances the lines carry. The supervisor emphasizes that if an obstruction is rodded out of a plugged line while the line is under pressure, there is a hazard of being burned by the caustic solution suddenly spurting out onto the employee. The supervisor explains that the way to avoid the hazard is to make sure that the line to be worked on is not under pressure by closing the valve leading into that part of the pipeline and bleeding the pipeline before beginning work. Supervisor A is _____ _____.

   a. explaining a hazard in one step of the job

   b. explaining how to avoid the hazard

   c. explaining a hazard in one step of the job and explaining how to avoid the hazard

9. Supervisor B is training a new electrician for the job of repairing large stationary power-driven equipment. The supervisor points out that a person at the controls of the equipment is not able to see all parts of the equipment. This means that if the equipment operator does not know a maintenance technician is working on the equipment, the operator might start up the equipment causing the maintenance technician to be seriously hurt or killed. Supervisor B is teaching the new employee about _____.

   a. a hazard that exists

   b. a safety or health rule

   c. what to do to avoid a hazard of the job

ANSWERS TO QUESTIONS:

8. c.

9. a. A hazard that exists. The operator's work station should be locked and tagged.

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10. Supervisor B tells the new electrician that the department has a rule requiring that the source of power be either locked out or physically disconnected before any maintenance is performed on power-driven equipment. Supervisor B is now teaching the new employee about _____ _____.

    a. a safety or health rule

    b. a hazard that exists

11. Supervisor B then explains to the new technician how to disconnect or lock out the power source of the equipment, prior to working on it, in the following ways:

    - by locking the electric switch on the power circuit in the "off" position
    - by disconnecting the motor electrically or mechanically
    - by removing the belt drive

    Supervisor B is teaching the new employee about _____ _____.

    a. what to do to avoid a hazard

    b. a hazard that exists

DEMONSTRATE EACH STEP

Once you have explained how to perform a job step safely and healthfully, demonstrate how to perform the step. Be sure to perform the step EXACTLY as you want the employee to do it. If personal protective equipment is required, use it. The purpose of the supervisor's performing a safety or health procedure exactly as the supervisor wants the employee to perform it results in the following:

- the employee sees each potentially hazardous step of his or her new job performed exactly as it should be done
- the employee learns safe and healthful work habits
- the employee sees how to avoid the hazards of the job

By providing good safety and health training before an employee starts a job, you can avoid the many industrial accidents and exposures to health hazards that occur as a result of poor work habits or lack of information about how to do the job in a hazard-free manner.

Supervisor C is demonstrating a step in a job operation to a new employee. The operation involves handling rough materials, and there is a risk of eye injury from metal chips. Supervisor C is performing the operation

ANSWERS TO QUESTIONS:

10. a.

11. a.

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wearing protective gloves and goggles. The supervisor wearing the protective equipment for self-protection and to perform the step exactly as the employee should do it.

12. By demonstrating each step of a job to a new employee, you are teaching safe and healthful work habits. Can you teach safe and healthful methods by doing the following things?

	Yes	*No*
a. showing an employee how to perform skilled hand operations in the safest manner	____	____
b. showing an employee how to lift bulky objects without getting a backache, sprain, or pulled muscle	____	____
c. performing an operation without wearing the proper protective equipment	____	____
d. taking a risky shortcut	____	____

13. Most people have to be shown things more than once in order to learn them. Repetition is necessary. Once you have done the following things, is your safety and health training job complete?

- told a new employee once what the hazards of the job are
- told a new employee once how to perform the job safely and healthfully
- given the new employee one demonstration of how to perform the job safely and healthfully

    a. Yes

    b. No

As experienced teacher knows that people do not learn things perfectly the first time, but that a number of repetitions are required, depending on how complex the step is that is being learned.

After you have explained and demonstrated (several times, if necessary) the safe and healthful way to do a particular job, let the new employee perform the job. Get the employee to tell you what each proper action is and to show you how to do it safely and healthfully. When you let the employee perform the job, you are encouraging the employee to learn by doing.

ANSWERS TO QUESTIONS:

12. a. Yes b. Yes c. No d. No

13. b. No. A new employee has too many things to think about to be able to learn from one explanation and demonstration. Evem an experienced employee who has been transferred to a new job will probably require more tham one demonstration.

As the employee learns to avoid job hazards by doing the job as you have demonstrated, you can tactfully correct any errors. Communicate to the employee that you expect different people to learn at different speeds. Explain that what is important is not how quickly a person learns or how many mistakes a person makes while learning, but how safely and healthfully the job is performed after it is learned.

Watch the employee go through the job cycle two or three times. Note what unsafe or unhealthful acts are performed and correct them, but be patient with misunderstandings and mistakes. Remember that it is normal for people to be nervous when they are learning new things, especially when their supervisor is watching them closely, and that being nervous may make them more awkward than usual.

Safe and healthful work habits are not automatic. THEY MUST BE TAUGHT.

Understanding of the need for safeguard devices on machines and for other protective equipment, when required, is not automatic. IT MUST BE TAUGHT.

The purpose of a safeguard and how to use it must be explained to an employee. This is part of the process of teaching the employee to perform the job safely and healthfully.

To the newly assigned operator of a planning mill, Supervisor A explained how an injury could occur if the operator removed the protective cover guard from the revolving cutter head. To a newly assigned foundry employee, Supervisor B explained that the purpose of the protective aluminum heat shield between the employee's work station and the blast furnace was to reflect the extreme heat of the furnace away from the employee and avoid heat stress. Both supervisors explained the NEED for and PURPOSE of a protective device.

The following are examples of a supervisor explaining to a new employee the PURPOSE of a protective guard device:

- Supervisor A explains to the new operator of a textile printing machine that the inrolling rolls of the machine are protected by a barrier which can be adjusted to admit various thicknesses of textiles, but not the operator's fingers.

- Supervisor B explains to the new operator of a punch press how the sweep guard prevents the operator's hand from remaining in the punch area when the press is tripped.

14. The harmful consequences of exposure to a safety hazard are likely to be more immediately obvious than the harmful consequences of exposure to a health hazard. Supervisor C is training a new employee who is going to operate a ripsaw. When Supervisor C points out the fact that if the guard on the blade of the saw is not kept in place while sawing, the operator's hand can come in contact with the ripsaw, the employee knows without being told that the blade will cut the operator's hand.

    However, when Supervisor D points out to a new food handler in a food processing plant the fact that, if the employee does not wear protective gloves while handling unprocessed cashew nuts, the handler's hands will come in contact with the cashew nuts; the employee will probably not know why such contact is harmful. Should Supervisor D provide the employee the additional information that contact with unprocessed cashew nuts causes blisters and other symptoms of severe dermatitis?

    a. Yes

    b. No

Supervisor C is training a new welder who is going to be wrecking a red-painted metal structure during a salvaging operation. The supervisor tells the welder to wear respiratory protective equipment while cutting the structure with the welding torch to avoid inhaling the fumes produced by the heat of the cutting operation.

15. Has Supervisor C told the new welder everything that is necessary to make the welder understand why inhaling the fumes would be harmful?

    a. Yes

    b. No

16. Supervisor C tells the new welder that the metal structure is painted with red lead and that lead combined with the heat from the welding torch will produce toxic fumes. The supervisor also explains what the physical results of breathing the toxic fumes will be. Has the supervisor given the new employee the additional information needed to understand why exposure to the health hazard will be harmful?

    a. Yes

    b. No

Following are hazards that employees will face on new jobs, along with information that supervisors should give the new employees about the hazards. These are examples of a supervisor giving enough information about a hazard, its consequences, and how the employee should protect himself.

Employee A is going to work in a cutlery grinding operation. The operation produces an almost invisible fine dust which remains suspended in the air which the employees breathe. The dust can have a harmful effect on employees' lungs.

- The supervisor needs to warn the employee about the presence of the dust in the air, to explain to the employee that the dust is harmful if breathed, and to tell the employee what kind of respirator to use and how to use it to be protected against breathing the dust.

ANSWERS TO QUESTIONS:

14. a.

15. b.

16. a.

Employee B is going to work in an industrial manufacturing process involving the use of toxic, caustic, and flammable solvents and other chemicals.

- The supervisor needs to show the employee each hazardous substance, tell the employee the name of each substance, explain how exposure can occur, describe the harm exposure can cause, and demonstrate how to avoid the exposure.

Employee C is going to work in a jet engine test area where the noise level is high enough to damage employees' hearing on very short exposure.

- The supervisor needs to tell the employee that the noise level can damage the employee's hearing on very short exposure, what kind of ear protectors must be worn, when they must be worn, and how to wear them.

Employee knowledge and understanding of hazards can act as a built-in safeguard.

The following examples illustrate inadequate safety and health training.

- Supervisor A tells new employees not to inhale fumes or get liquid on their skins, but doesn't tell them exactly how to avoid these hazards.

- Supervisor B gives new employees face masks and respirators and tells them to work safely, but provides no further details.

The supervisors have not given complete information to train these employees properly.

Previous items have contained examples of jobs which require the use of personal protective equipment to shield employees from hazards in the job. An important part of job safety and health training is informing an employee about the protective equipment required for the job. Its purpose and how it is used should be explained in detail.

17. Supervisor A points out to a new employee who will be handling bronze castings that many of the castings have rough edges which can injure the hands. The supervisor shows the employee the kind of protective _____ to wear to protect the hands when handling the rough castings.

18. Supervisor B points out to a new employee who is going to handle pig iron and other heavy objects that injury to the feet can occur if one of these heavy objects is dropped. The supervisor shows the new employee the kind of safety _____ to wear to protect the feet when handling the heavy objects.

ANSWERS TO QUESTIONS:

17. b.

18. a.

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19. Supervisor C points out to a new employee who is going to repair motor vehicles that injury to the face and eyes can occur from falling metal chips and other debris while working underneath a vehicle. The supervisor shows the employee the kind of _____ to wear to protect the face and eyes from injury while lying underneath a vehicle.

    a. shoes

    b. gloves

    c. face shield

Each of the supervisors in the preceding item has told his employees about:

- a HAZARD that exists in the job
- the proper PERSONAL PROTECTIVE EQUIPMENT to wear to protect themselves against the hazard
- the PURPOSE of the protective equipment

It is not sufficient to merely mention the need for protective equipment. The hazard must be emphasized and the purpose and function of the equipment must be explained in detail. This is especially necessary because of the fact that using or wearing protective equipment can be somewhat awkward, inconvenient, or uncomfortable, especially when it is first worn. An employee must be CONVINCED that there is a real danger and that the equipment provides real protection against the hazard. The employee is then more likely to be willing to tolerate a certain amount of inconvenience or discomfort in order to protect his or her health. When Supervisor A tells new employees that safety glasses are required to be worn on the job, the supervisor follows up by demonstrating the impact resistance of the glasses. Supervisor A shows new employees actual safety glasses or photographs of safety glasses which have been shattered as they absorbed the impact of a flying object and saved an employee's eyesight. Then the supervisor hits an old pair of safety glasses with a hammer or uses the old safety glasses to drive a nail into a soft board. The supervisor is trying to convince new employees that wearing safety glasses really does protect their eyes from flying objects.

20. Another reason to give a new employee detailed information about the purpose and use of personal protective equipment is to reduce the likelihood that a protective device will be used for the wrong purpose and give the employee a false sense of security. If an employee knows the difference between various kinds of respirators, for example, the employee will be _____ likely to use a respirator with a dust filter for protection against solvent vapors.

    a. Less

    b. More

ANSWERS TO QUESTIONS:

19. c.

20. a.

CONVINCING AN EMPLOYEE TO USE PROTECTIVE EQUIPMENT

Supervisor A works in a meat packing house where sharp knives and cleavers are used. The supervisor reminds a new employee that when pressure is applied with a sharp instrument there is a danger that the instrument will slip and injure the user. The supervisor tells the employee to wear a padded apron when using the knives and cleavers. The supervisor demonstrates to the employee that the apron does not unduly restrict mobility. The supervisor shows the employee that the padded apron has quick release fasteners to avoid friction burns or other injury if the apron gets caught in the conveyor belt carrying the meat being processed. Supervisor A is telling the new employee about:

- a HAZARD of the job
- HOW TO AVOID the hazard by wearing personal protective equipment
- what SPECIFIC personal protective equipment to wear

In training a new employee in job safety and health, a distinction needs to be made between personal protective equipment the employee will use in the normal work situation and equipment to be used in an EMERGENCY situation. Supervisor B tells a new employee in a cotton gin about the respiratory protective equipment to wear to prevent inhaling harmful cotton dust. Supervisor C tells a new employee in an ice plant where ammonia leaks sometimes occur about the gas mask to keep handy for protection should such a leak occur.

21. Supervisor B is telling a new employee about personal protective equipment to be used in a/an _____ job operation.

    a. Emergency

    b. Normal

22. Supervisor C is telling a new employee about personal protective equipment to be used in a/an _____ _____ situation.

    a. Emergency

    b. Normal

When telling new employees about the personal protective equipment required for their jobs, it is necessary to attempt to counter the objections employees typically have about wearing such equipment.

Take a realistic approach. Avoid underemphasizing or overemphasizing the hazards of the job. Because the objections have some basis in fact, it is important to explain how disadvantages can be minimized.

Tell the employee what discomforts can occur and how to deal with them. For example, if safety glasses cause headaches or dizziness, the reason may be that the employee is nearsighted or farsighted and needs to

ANSWERS TO QUESTIONS:

21. b.

22. a.

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wear corrective glasses. An employee who is aware of this fact can have an eye examination and get corrective safety glasses to eliminate the problem. Remember that employees don't expect jobs to be perfect. They adapt to all kinds of unsafe and unhealthy conditions and practices. Put that adaptability to a positive, constructive use. Get them to adapt to using protective equipment and safeguard devices.

23. In addition to personal protective equipment, some types of health hazards require monitoring devices or test equipment for such purposes as determining the presence of a contaminant in the air, measuring the amount of a contaminant in the general area, or measuring the amount of exposure a particular employee has received. Supervisor A is training a new employee who will work in an area where there is a health hazard from an air contaminant. The supervisor tells the employee what the air contaminant is and how the contaminant can be harmful. Each employee who works in the area wears a lapel sampler to measure the individual's exposure to the contaminant. Does the supervisor need to explain to the new employee the purpose of the lapel sampler and how to read it?

    a. Yes

    b. No

In addition to telling a new employee about required personal PROTECTIVE equipment, a supervisor should tell the employee what work clothing is considered safe and UNSAFE for the job and why. Supervisor A tells all employees who are going to work around drill presses, lathes, or other equipment with exposed revolving parts, that neckties, scarves, and loose or baggy clothing create a hazard. Supervisor B tells machine operators about the danger of wearing finger rings. Supervisor C cautions employees who will be working around flying sparks not to wear pants with cuffs. These supervisors are warning employees about unsafe work clothing.

Certain types of jobs present higher than normal hazards to the safety and health of employees. Examples are situations where employees work around high-pressure equipment or equipment that uses or generates flammable liquids or explosive gases or dusts; processes that generate silica dusts or lead fumes; work in tunnels; processes that involve cotton dusts or asbestos; and manufacture of toxic or caustic chemicals and petroleum products. For these jobs, more intensive safety and health training should be provided. Like employees in all jobs, people who work in extra hazardous situations require training in ways to avoid hazards in normal job activities. In addition, they require training in actions to take if an accident or exposure to a health hazard results. Employees in a chemical plant, for example, who are working with toxic, caustic, flammable, or explosive substances need to be trained about what to do in case a large volume of a hazardous chemical is spilled or released. Training in use of safety showers and eye baths is necessary. Where the possibility exists that a pipe connection might break off a chlorine tank, employees need to be taught about special clamp fittings prepared in advance and kept in an emergency kit.

24. If a new employee gets splashed with a caustic solution and learns to use the safety shower by being pushed under it by co-workers, has this employee in a high hazard job received adequate special safety and health training?

    a. Yes

    b. No

ANSWERS TO QUESTIONS:

23. a. Yes. The supervisor should also tell the employee or the employee's representative of his or her right to view such monitoring when there is an applicable OSHA Standard requiring monitoring.

24. b.

The following should then always be included in safety and health training for high hazards jobs.

- What to do and what not to do in order to perform normal job operations safely and healthfully
- What special procedures to perform and special devices to use if an accident or exposure to a health hazard occurs

Once you have given a new employee job safety and health training, this does not mean your training job is finished. You must follow up the safety and health instruction you have done before the employee starts the job by observing the new employee after he or she is performing the new job on a full-time basis. See that all the safety and health procedures have been correctly learned and remembered.

Don't overlook the fact that in some situations, employees who are already on the job will require safety and health training and/or retraining. If the emphasis on job safety and health in your company is relatively new, for example, employees already on the payroll may not have received safety and health training when they started their jobs. Even when employees have received safety and health training, they sometimes gradually develop unsafe or unhealthful work habits. Another type of situation where safety and health training is needed by employees already on the job occurs when a change in the job or its surroundings present a hazard which the employees are not aware of. The supervisor can determine whether retraining is required by checking the work habits of employees through frequent contact and close observation. The following follow-up items will discuss techniques of job observation which can be used to determine the need for retraining.

To decide how effective your training has been, you have to observe your employees' performance to see whether they do their job in a safe and healthful manner.

Training follow-up by job observation means exactly what the title implies: observing your employees' performance on the job.

There are three types of job observations. One type is unplanned and is called INCIDENTAL observation. This is the type of observation that occurs when you are on the move getting other things accomplished. From incidental observation you get a general impression of how a job is being done. You might notice, for example, someone performing a task in an especially careful manner or someone taking a dangerous shortcut.

Another type of job observation is the INTENTIONAL-CASUAL observation in which you plan to observe job performance as part of your normal work routine. For instance, you might stop to see how well a new employee is doing, to see whether proper instruction in job safety and health has been given.

A third type of job observation is called FORMAL-TOOL OBSERVATION. Formal-total observation involves a start-to-finish observation of a specific job in a systematic way.

Match the following examples with the names of a type of job observation. The name of a type can be used more than once.

Method		*Examples*
25. Incidental observation	_____	a. You systematically observe one of your employees operating a punch press
26. Intentional-casual observation	_____	b. While walking by a work area, you see an employee not wearing safety goggles
27. Formal-total observation	_____	c. You happen to see an employee using the wrong job technique
		d. You do a complete observation of a punch press operation
		e. You stop briefly to see how a new employee is doing

28. Which of the three types of job observation is unplanned?

29. Which one of the three types of job observation requires the most planning?

THE BENEFITS OF FORMAL-TOTAL OBSERVATION

There are many benefits of a formal-total observation. Here are some examples of the benefits of this systematic way of observing a specific job.

- It gives you reliable feedback on the effectiveness of your safety and health training efforts.
- It keeps you aware of current work procedures in your area and helps you in correcting hazardous practices before they result in injuries or illnesses.
- It provides you with excellent opportunities for positive reinforcement of safe and healthful work habits.
- It increases awareness of the importance of safety and health in all jobs.

Conducting a formal-total observation requires that you observe a specific job in a systematic way.

After an employee has started work on a job on a full-time basis, you can use another kind of safety and health training called SAFETY AND HEALTH TIPPING. A safety or health tip is a quick hint or reminder to an employee to work safely and healthfully. It can deal with any aspect of the job. It might be a reminder to wear a respirator when entering a hazardous work environment. It might be a warning that some bags of caustic materials appear to be leaking, and a reminder to wear an apron, gloves, and face protection.

You can reap the benefits of an organized safety and health tipping program if you will get into the habit of including a tip with each task assignment. Whenever you give an employee a work assignment, ask yourself

ANSWERS TO QUESTIONS:

25. b., c.

26. e.

27. a., d.

28. Incidental Observation

29. Formal-total Observation. In this method you would systematically study an employee performing the job

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this key question: "What is the most likely accident or exposure to a health hazard that can occur on this particular job?" Then give your tip on how to avoid the problem. People tend to remember what they hear last. If the last communication they hear from you is the key safety or health TIP for the task, the chances of their remembering and avoiding the hazard are very good. This visibly demonstrates your concern for the safety and health of employees and helps build safe and healthful work habits.

30. A safety or health tip is most effective when used:

    a. in a classroom training session

    b. on the job

31. Would reminding employees to use their safety lenses while operating grinding machines be a safety and health tip?

    a. Yes

    b. No

32. Suggestions made by you in your work area to protect employees from safety or health hazards are called safety and health _____ .

Let's practice safety and health tipping. You are the foreman of a plant maintenance team. You have just assigned an employee to replace the drive belt on an air compressor. In order to replace the belt, the drive motor must be stopped and the employee must go behind the machine to the pulley area. It takes about 30 minutes to change a belt, during which time the employee is not visible from the starting switch. Other employees may need compressed air to run their machines and the reserve supply of air will be exhausted in 15 minutes. There is a good possibility that another employee, needing air to power a tool, will try to turn on the compressor when the reserve supply is exhausted. The required safety procedure is to place a DO NOT START tag over the switch and a "lock out" on the main switch handle.

33. In your own words, what would be your safety tip for this situation, as you assign the task to the employee? _____

    _____

    _____

Frequent safety and health tipping will help to avoid injury and illness in your work area.

34. It is more helpful to the employee when you include a safety or health tip with _____ _____ task assignment.

    a. most

    b. every

    c. some

ANSWERS TO QUESTIONS:

30. b. On the job. This is most effective because the employee receives the tip just before starting the task.

31. a.

32. Tipping

33. "Please remember to place a DO NOT START tag on the main switch and put a lock on the main switch handle so it can't be turned on." (This safety procedure is referred to in CFR 1910.145.)

34. b.

SUMMARY

In this lesson you have learned about the emphasis that the Act places on training. The fact that safety and health training is necessary for new employees, employees changing jobs, newly created jobs, and changed jobs was discussed. You have learned that employees should be taught about general safety and health rules and how to apply these rules to their own jobs. The need to train employees in emergency procedures and to give them instructions about reporting of hazardous acts, hazardous conditions, injuries, illnesses, events causing property damage, and near misses was reviewed. You have learned the importance of teaching employees about the hazards of their specific jobs and how to perform their jobs in a safe and healthful manner using the necessary procedures, precautions, and safeguards. You have learned how to train the employees by explaining what to do, demonstrating what to do, and then letting the employee perform the job and how to follow up training with job observation. Use of the technique of safety and health tipping was explained as a useful way to promote and maintain safety and healthful job performance among all the employees you supervise.

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